63D CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { DOCUMENT No. 1142.

FERRY COVE, MD.

LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING,

WITH A LETTER FROM THE CHIEF OF ENGINEERS, REPORTS ON PRELIMINARY EXAMINATION AND SURVEY OF FERRY COVE, MD.

AUGUST 7, 1914.—Referred to the Committee on Rivers and Harbors and ordered to be printed, with illustration.

WAR DEPARTMENT,
Washington, August 7, 1914.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

SIR: I have the honor to transmit herewith a letter from the Chief of Engineers, United States Army, dated August 6, instant, together with copies of reports from Col. Lansing H. Beach, Corps of Engineers, dated October 1, 1913, and July 9, 1914, with map, upon a preliminary examination and survey, respectively, of Ferry Cove, an arm of Eastern Bay, Md., made by him in compliance with the provisions of the river and harbor act approved March 4, 1913.

Very respectfully,

LINDLEY M. GARRISON,
Secretary of War.

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, August 6, 1914.

From: The Chief of Engineers, United States Army.
To: The Secretary of War.
Subject: Preliminary examination and survey of Ferry Cove, Md.

1. There are submitted herewith, for transmission to Congress, reports dated October 1, 1913, and July 9, 1914, with map, by Col. Lansing H. Beach, Corps of Engineers, on preliminary examination and survey, respectively, of Ferry Cove, an arm of Eastern Bay, Md., authorized by the river and harbor act approved March 4, 1913.

2. Ferry Cove is an indentation on the westerly side of the peninsula extending southwesterly between Chesapeake Bay and Harris Creek. It has a commerce reported as amounting to 5,294 tons, and is the shipping center of a locality said to contain an area of from 15 to 20 square miles. Complaints have been made of insufficient depth in the channel and of the difficulty experienced by the steamer in reaching the wharf on account of the number of vessels anchored in the deeper water of the approach channel, no other place being available for them to anchor. The district officer states that a considerable territory is dependent on the steamboat for its prosperity, and it is threatened with a complete loss of this convenience unless something is done to relieve the conditions. He submits estimates of cost for channels 100 feet wide and 10, 9, and 7 feet deep, with an anchorage and turning basin at the upper end, and expresses the opinion that the locality is worthy of improvement to the extent of providing a channel and anchorage 7 feet deep, at an estimated cost of $4,950. In this opinion the division engineer concurs.

3. These reports have been referred, as required by law, to the Board of Engineers for Rivers and Harbors, and attention is invited to its report herewith, dated July 14, 1914, concurring with the views of the district officer and division engineer.

4. After due consideration of the above-mentioned reports, I concur with the views of the district officer, the division engineer, and the Board of Engineers for Rivers and Harbors, and therefore report that the improvement by the United States of Ferry Cove, Md., is deemed advisable to the extent of providing a channel 100 feet wide and 7 feet deep at mean low water, with an anchorage and turning basin at the upper end, approximately as shown on the accompanying map, at an estimated cost of $4,950 for first construction and $250 per annum for maintenance. The full amount of the estimate should be provided in one appropriation.

DAN C. KINGMAN,
Chief of Engineers, United States Army.

REPORT OF THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS ON SURVEY.

[Third indorsement.]

THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS,
July 14, 1914.

To the CHIEF OF ENGINEERS, UNITED STATES ARMY:

1. The board has reviewed the reports of the district officer, dated October 1, 1913, and July 9, 1914, on preliminary examination and survey, respectively, of Ferry Cove, an arm of Eastern Bay, Md. This cove, which is also known as "Haddaway Cove," is an indentation on the westerly side of the peninsula extending southwesterly between Chesapeake Bay and Harris Creek. It is the shipping center of a locality said to contain an area of from 15 to 20 square miles, including the settlements of Sherwood, Wittman, Valliant, and also Tilghman, Fairbank, Bozman, and Neavitt. There is steamboat service twice weekly in each direction between Baltimore and Lowe's wharf at this point. There is also a steamboat nightly in each

direction between Baltimore and Tilghman Island Harbor (Avalon), but it is said that a considerable portion of the commerce of Fairbank and Tilghman is carried over Lowe's wharf on account of the advantage of the day boats to and from that place. The total commerce of Ferry Cove is reported as amounting to 5,294 tons, valued at $140,100.

2. Parties interested in the improvement of the cove state that on account of the shoaling of the entrance it could only be navigated at mean low water by vessels of not over 4 feet draft, and they desire to have a channel dug 7 feet deep at mean low water, from 75 to 100 feet wide, with a turning and anchorage basin near the wharves.

3. As a result of the survey the district officer finds that there is now a practicable channel of 7 feet depth to within about 700 feet of the wharves. He is of opinion that this depth is sufficient for present requirements. Complaints have been made, however, of the difficulty experienced by the steamer in reaching the wharf on account of the number of vessels anchored in the deeper water of the approach channel. There is no other place convenient to the wharf where vessels can lie. To make the locality fully available, he states that there is need of a turning and anchorage basin at the upper end. He submits estimates of cost for channels 100 feet wide and 10, 9, and 7 feet deep, with an anchorage and turning basin at the upper end, amounting to $18,550, $13,370, and $4,950, respectively. The district officer expresses the opinion that Ferry Cove is worthy of improvement to the extent of providing a channel 100 feet wide and 7 feet deep at mean low water, with a suitable anchorage and turning basin at the inner end, as shown on accompanying map, or in such slightly different position as may be found most advantageous for navigation, at an estimated cost of $4,950 and $250 per annum for maintenance. In this view the division engineer concurs.

4. From the facts presented, it appears to the board that the improvement proposed by the district officer is essential to the maintenance of regular steamboat service to this locality, and that the benefits to be derived therefrom, which will be distributed throughout a considerable area dependent upon water transportation, are sufficient to justify the relatively small outlay involved. It therefore concurs with the district officer and the division engineer in the opinion that it is advisable for the United States to undertake the improvement of Ferry Cove, Md., by the construction of a channel 100 feet wide and 7 feet deep at mean low water, with a turning basin at the inner end, at an estimated cost of $4,950 and $250 per annum for maintenance, located approximately as shown on the accompanying map. The total estimated first cost, $4,950, should be made available in one appropriation.

5. In compliance with law, the board reports that there are no questions of terminal facilities, water power, or other subjects so related to the project proposed that they may be coordinated therewith to lessen the cost and compensate the Government for expenditures made in the interests of navigation.

For the board:

FREDERIC V. ABBOT,
Colonel, Corps of Engineers,
Senior Member Present.

PRELIMINARY EXAMINATION OF FERRY COVE, MD.

UNITED STATES ENGINEER OFFICE,
Baltimore, Md., October 1, 1913.

From: The District Engineer Officer.
To: The Chief of Engineers, United States Army
(Through the Division Engineer).
Subject: Preliminary examination of Ferry Cove, an arm of Eastern Bay, Md.

1. In compliance with department letter of March 18, 1913, the following report is submitted on preliminary examination of Ferry Cove, and arm of Eastern Bay, Md., as provided for in the river and harbor act of March 4, 1913.

2. Ferry Cove, an arm of Eastern Bay, Md., is also known as "Haddaway Cove." It is an indentation in the westerly side of the peninsula on the east side of Chesapeake Bay, between it and Harris Creek, and is about 5½ miles southwesterly of Claiborne, in latitude 36° 46′ N. and longitude 76° 20′ W. The main landing is called Lowe's wharf. There is a mean rise and fall of about 2 feet in the tide.

3. The cove is the shipping center of a locality said to contain an area of from 15 to 20 square miles and a population of about 3,000, inhabiting the settlements of Sherwood, Wittman, Valliant, and also Tilghman, Fairbank, Bozman, and Neavitt. In these places there are two oyster, fish, and crab packing houses, three tomato canneries, one saw and planing mill, two blacksmith and wheelwright shops, seven retail general merchandise stores, and one wholesale general merchandise store. There is a steamboat between Baltimore and Lowe's wharf in each direction twice weekly. There is a steamboat nightly in each direction between Baltimore and Tilghman Island Harbor (Avalon), the latter of which is nearer both to Fairbank and Tilghman, but it is said that a considerable portion of the commerce of the two places is carried over Lowe's wharf on account of the advantage of the day boats to and from there. From Bozman and Neavitt merchandise is said to be handled to and from Sherwood in small boats, being hauled between Sherwood and the wharf. Between Valliant and the wharf the transportation is by launch.

4. There is no railroad nearer than McDaniel, about 5.5 miles distant, and all of the commerce of the locality is handled in steam, gasoline, and sail boats. It is given as follows:

	Tons.	Value.
Ingoing:		
General merchandise	200	$30,000
Coal	25	150
Phosphate	50	1,000
Tomatoes	75	750
Oysters, 80,000 bushels	about 3,200	35,000
Fish, 3,000 barrels	do 375	6,000
Packing-house supplies	200	10,000
	4,125	82,900

	Tons.	Value.
Outgoing:		
Wheat and corn, 10,000 bushels.....about..	300	$8,000
Fruits, 500 boxes.....do....	25	500
Vegetables, 1,000 baskets.....do....	16	500
Live stock, 200 head.....do....	10	2,000
Canned goods, 10,000 cases.....do....	400	18,000
Shucked oysters, 20,000 gallons.....do....	100	18,000
Fish, 2,500 barrels.....do....	313	10,000
Crabs, 100 barrels.....do....	5	200
	1,169	57,200
Total commerce.....	.....	140,100

5. Parties interested in the improvement of the cove, where no work has ever been done by the General Government, state that the entrance to the cove has shoaled so that it is now only navigable at mean low water by vessels of not over 4 feet draft, whilst in and outside of it there is sufficient water for boats of 6 feet draft. They desire to have a channel dug 7 feet deep at mean low water from 75 to 100 feet wide, with a turning and anchorage basin near the wharves.

6. The wharves, of which there are three, are privately owned, open, wooden-pile structures, and are sufficient for the present and prospective commerce; they are equipped with rough wooden storehouses and small cranes.

7. In addition to the steamboat, which has a tonnage of 549, there are 2 gasoline launches of 10 tons, with a draft of about $3\frac{1}{2}$ feet, and 25 sailing vessels of an average tonnage of 15, with a draft of 4 feet, regularly using this harbor. It is also said that there are 25 other sailing vessels which occasionally use it in stormy weather.

8. It is said that an improvement as desired would increase the commerce from 10 to 20 per cent; that it would not affect freight rates by the steamboat, but would cause a reduction in them by sailing vessels to distant points, as vessels of larger carrying capacity would engage in the trade of the locality.

9. There are no questions of water-power development, land reclamation, or similar subjects that could be considered in connection with any improvement at this locality.

10. The locality is largely dependent on the steamboat for its prosperity, and it is threatened with a complete loss of this convenience unless something is done to relieve the channel conditions. About one-fourth of the calls one way are now said to be missed in winter on account of lack of sufficient water over the bars at the entrance to the cove.

11. It is thought that the locality is worthy of a survey by the General Government to determine the cost, extent, and advisability of an improvement.

12. A sketch map[1] of the locality, taken from a coast survey chart, accompanies this report.

LANSING H. BEACH,
Colonel, Corps of Engineers.

[1] Not printed.

[First indorsement.]

OFFICE OF DIVISION ENGINEER, EASTERN DIVISION,
New York City, October 3, 1913.

To the CHIEF OF ENGINEERS, UNITED STATES ARMY:

Concurring in the opinion of the district officer.

W. M. BLACK,
Colonel, Corps of Engineers.

[Third indorsement.]

BOARD OF ENGINEERS FOR RIVERS AND HARBORS,
October 28, 1913.

To the CHIEF OF ENGINEERS, UNITED STATES ARMY:

For reasons stated herein, the board concurs with the district officer and the division engineer in recommending a survey in order to determine the extent and advisability of the improvement.

For the board:

W. M. BLACK,
Colonel, Corps of Engineers,
Senior Member of the Board.

SURVEY OF FERRY COVE, MD.

WAR DEPARTMENT,
UNITED STATES ENGINEER OFFICE,
Baltimore, Md., July 9, 1914.

From: The District Engineer Officer.
To: The Chief of Engineers, United States Army
(Through the Division Engineer).
Subject: Survey of Ferry Cove, an arm of Eastern Bay, Md.

1. In compliance with department letter of November 14, 1913, the following report is submitted on survey of Ferry Cove, an arm of Eastern Bay, Md.

2. The field work was done in February and March, 1914, and the results are shown on the accompanying map, which indicates the present conditions at the locality.

3. The survey extended from the wharf to the 10-foot contour along the thalweg of the cove, as pointed out by the best-informed people of the locality and as indicated by usage of the steamer and other vessels running into the cove. It failed to develop the existence of any bar with only 4 feet of water over it at mean low water, as stated at the time of the preliminary examination by parties interested in the proposed improvement to exist, and these parties when taken into the boat with the survey party were unable to point out its location.

4. A tide gauge was established by running a line of checked levels from the United States Coast and Geodetic Survey bench mark at Avalon, which is the nearest point at which a plane of reference had been established. The mean range of tide was found to be about 1.4 feet instead of about 2 feet, as stated in the preliminary examination report.

5. The bottom consists of hard sand, excepting at a few places in the channel, where there are small areas of sticky mud.

6. Estimates for channels 100 feet wide, 10, 9, and 7 feet deep, and with an anchorage and turning basin at the upper end are, respectively, as follows:

For a channel 100 feet wide by 10 feet deep at mean low water, with side slopes of 1:3:		
64,500 cubic yards, scow measurement, at 20 cents	$12,900	
Engineering, superintendence, and contingencies, 10 per cent	1,290	
		$14,190
1 foot over depth:		
19,800 cubic yards, scow measurement, at 20 cents	3,960	
Engineering, superintendence, and contingencies, about 10 per cent	400	
		4,360
		18,550

Probable cost of maintenance, $700 per annum.

For a channel 100 feet wide by 9 feet deep at mean low water, with side slopes of 1:3:		
43,200 cubic yards, scow measurement, at 20 cents	8,640	
Engineering, superintendence, and contingencies, about 10 per cent	860	
		9,500
1 foot over depth:		
17,600 cubic yards, scow measurement, at 20 cents	3,520	
Engineering, superintendence, and contingencies, about 10 per cent	350	
		3,870
		13,370

Probable cost of maintenance, $500 per annum.

For a channel 100 feet wide by 7 feet deep at mean low water, with side slopes of 1:3:		
12,900 cubic yards, scow measurement, at 20 cents	2,580	
Engineering, superintendence, and contingencies, 10 per cent	258	
		2,838
1-foot over depth:		
9,600 cubic yards, scow measurement, at 20 cents	1,920	
Engineering, superintendence, and contingencies, 10 per cent	192	
		2,112
		4,950

Probable cost of maintenance, $250 per annum.

7. There are no available data on which to base an estimate of the cost of maintenance, but it is believed that the figures given are as nearly correct as can be stated at this time.

8. The full cost of an improvement should be provided at one time, otherwise the cost of the work will be greater.

9. Nothing further bearing on the merits of the case, in addition to the facts given in the preliminary examination report, excepting as stated above, has been developed by the survey.

10. There is now a practicable channel of 7 feet depth to within about 700 feet of the wharves. This depth is all that was requested, and is regarded as sufficient for present requirements. Complaints have reached this office because of the inability of the steamer to reach the wharf on account of the number of vessels anchored in the deeper water of the approach channel, there being no other place convenient to the wharf where vessels can lie. To make the locality fully available, there is need of a turning and anchorage basin at the upper end.

11. As stated in the preliminary examination report, there are no questions of water power, terminal facilities, or other subjects so related to the proposed improvement as to be considered in connection therewith to lessen the cost.

12. From the above facts, I am of opinion that Ferry Cove, an arm of Eastern Bay, Md., is worthy of improvement to the extent of a channel 100 feet wide and 7 feet deep at mean low water, with a suitable anchorage and turning basin at the inner end, as shown on the map, or in such slightly different position as may be found most advantageous for navigation.

LANSING H. BEACH,
Colonel, Corps of Engineers.

[First indorsement.]

OFFICE OF DIVISION ENGINEER, EASTERN DIVISION,
New York City, July 11, 1914.

To the CHIEF OF ENGINEERS, UNITED STATES ARMY:

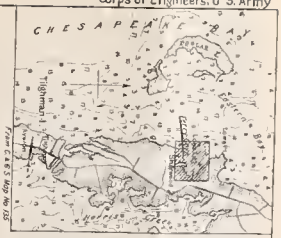
Concurring in the views of the district engineer officer.

W. M. BLACK,
Colonel, Corps of Engineers.

[For report of the Board of Engineers for Rivers and Harbors on survey, see page 2.]

War Department

Corps of Engineers, U. S. Army



Punch Pt

Note. U.S.E. tide gauge is a plain staff fixed to a pile near an angle in the wharf. The zero of the gauge is set at mean low water. The Bench Mark No I is the top of 8 nails driven thus ⁘ into the top of the pile to which gauge is attached. Elev = 3.75. Range of tide is 1.4 ft. B.M. No 2 is the center of a row of 4 nails driven thus ···· into the end of the cap carrying the second row of piles from the corner of the wharf near the gauge. Proposed channel is shown thus — — — —

FERRY COVE
AN ARM OF EASTERN BAY, MD.

PREPARED UNDER THE DIRECTION OF
LANSING H BEACH
Col Corps of Engineers, U.S Army

John S Doyle, Asst Engr.

Scale

Surveyed by J Shlessinger
Drawn by W A Wansleben
1914

U.S Engineer Office
Baltimore, Md July 9 1914
Approved:
Lansing H. Beach,
Col Corps of Engrs, U.S.A
To accompany report of July 9 1914
to the Chief of Engineers.

House Doc. No. 1192; 63d Cong., 2d Sess.